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(54) Title: REDUCTION IN BIOLOGICAL OXYGEN DEMAND LEVELS IN WASTE WATER EFFLUENTS

(57) **Abstract:** The aeration process of the present invention reduces the biological oxygen demand of aqueous waste streams including those from animal meat processing facilities, vegetable or fruit processing facilities, fermentation processes and certain organic chemical processes. Magnesium chloride is used at a concentration of from about 0.02% to about 3.0% (w/v) and all ranges and concentrations therebetween, desirably from about 0.02% to about 0.5% (w/v), and aeration is carried out at a rate sufficient to maintain a dissolved oxygen level of from about 1 to about 8 ppm for to about seven days, usually one to seven days. Desirably, especially for animal meat processing waste streams, a dissolved air flocculation step precedes the aeration for (further) reduction of biological demand, and preferably the dissolved air flocculation step is carried out with a magnesium salt.



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